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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) MLSE 1035-1	
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		First Named Inventor Allen CARROLL	
		Art Unit 1756	Examiner Daborah Chacko Davis
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the		<u><i>Ernest J. Beffel, Jr.</i></u> Signature	
<input type="checkbox"/>	applicant/inventor.	<u>Ernest J. Beffel, Jr.</u> Typed or printed name	
<input type="checkbox"/>	assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		
<input checked="" type="checkbox"/>	attorney or agent of record. Registration number <u>43,489</u>	<u>(650) 712-0340</u> Telephone number	
<input type="checkbox"/>	attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____	<u>27 June 2006</u> Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input type="checkbox"/> *Total of _____ forms are submitted.			

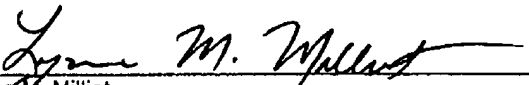
This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.8. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Lynne M. Milliot

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Allen CARROLL

Application No.: 10/679,701

Confirmation No.: 9625

Filed: 03 October 2003

Title: **Method and Device for Immersion
Lithography**

Group Art Unit: 1756

Examiner: Daborah CHACKO DAVIS

CUSTOMER NO.: 22470

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

In response to the Final Office Action mailed March 27, 2006, Applicant submits
this Pre-Appeal Brief request for conference review, under the PTO's pilot program.

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REMARKS

Claims 1-28 are currently pending in this application and all will be appealed.

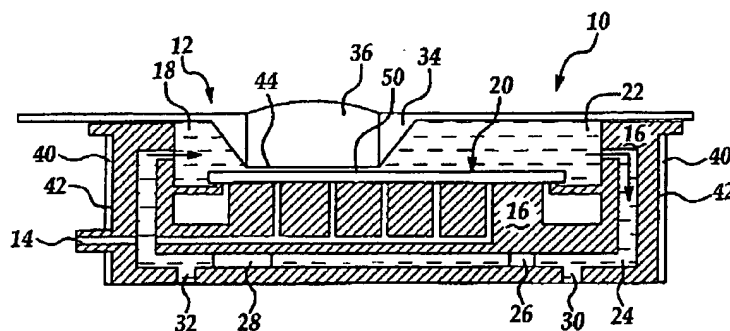
The only issues for appeal are §§ 102-103 rejections, which were made final without fully taking into account the response filed on January 4, 2006.

The final rejection should be withdrawn because the Examiner clearly misread the prior art reference and made assertions of implicit disclosure that are implausible and not supported by any evidence of record.

The Technologies Taught by the Disclosure and Reference are Entirely Different

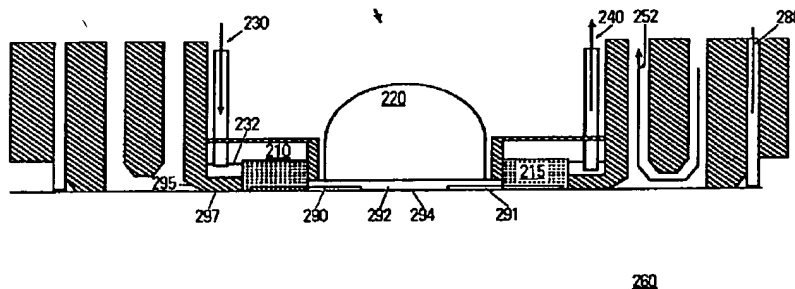
The general field of technology is immersion micro lithography.

The primary reference, U.S. Patent Application Publication No. 2004/00075895 (Lin) teaches a stage including a bath into which a wafer 20 is placed.



The lithographic optics 36 are lowered into the bath and moved through the bath to expose sections of the wafer.

The disclosure presents integration of fluid channels into the optics, instead of the stage. The area that is wetted by fluid is limited by capillary forces between the wafer 260 and a final lens 220 of the immersion optics (all but 260).



These features are separately claimed in independent claims 1, 11 & 28 (orifice in optics) and 17, 20 & 25 (capillary forces). They are combined in dependent claims.

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Rejection under Section 102 is Contrary to Law

The Examiner's error is that the rejections failed to distinguish between Lin's stage/bath and Lin's optics. When the two are distinguished, there is no basis for the rejections.

The Examiner rejected **claims 11-16 and 20-22** under 35 U.S.C. § 102(e) as anticipated by (Lin). The Examiner treated all of these claims in a unified discussion. FOA at 2.

Claims 11-16 and 20-22 include the limitations:

11. An immersion lithographic system for patterning a work piece arranged at an image plane and covered at least partly with a layer sensitive to electromagnetic radiation, comprising

- *a source emitting electromagnetic radiation onto an object plane,*
- *a mask arranged at said object plane to relay said electromagnetic radiation toward said work piece,*
- *an immersion medium contacting at least a portion of an immersion optics of said lithographic system and a portion of said work piece, wherein said immersion medium is **supplied through at least one orifice arranged in said immersion optics.***

20. An immersion lithographic system for patterning a work piece arranged at an image plane and covered at least partly with a layer sensitive to electromagnetic radiation, comprising

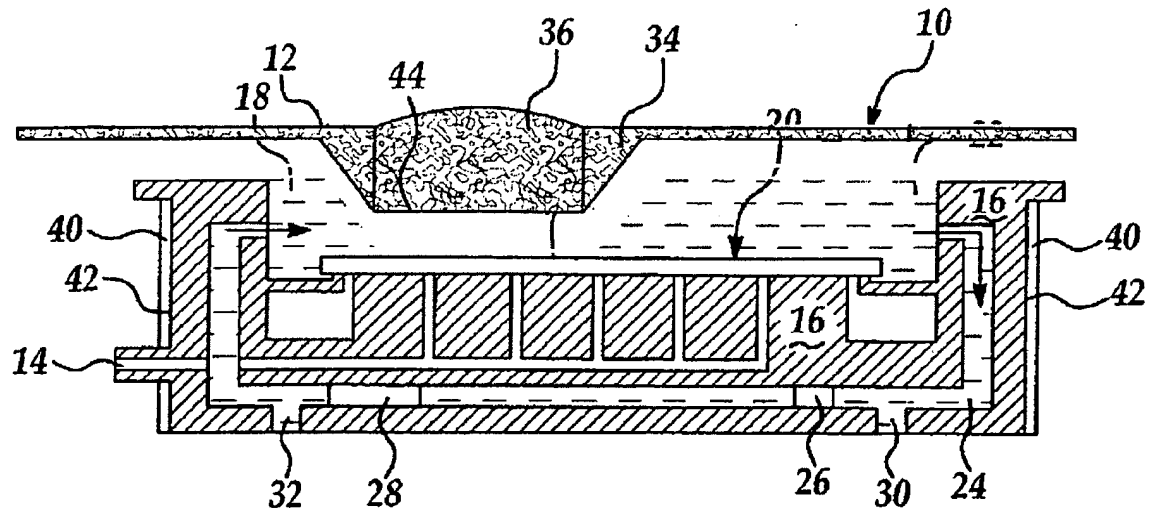
- *a source emitting electromagnetic radiation onto an object plane,*
- *a mask, adapted to receive and modulate said electromagnetic radiation at said object plane and to relay said electromagnetic radiation toward said work piece,*
- *an immersion medium contacting at least a portion of a final lens of said lithographic system and a portion of said work piece, wherein an **area of said contacting is restricted by capillary forces.***

The **bold faced** portions of these limitations are not found in Lin and the Examiner did not argue to the contrary in the initial OA.

In the FOA, at 4-5, the Examiner argued that the inlet 30 and outlet 32 are part of Lin's immersion optics. One of ordinary skill in the art would understand that the inlet and outlet are features of the stage, not the immersion optics. This is made plain by exploding Lin's FIG. 1B and separating the optics that move through the bath from the bath that is integrated with the stage:

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**Figure 1B**

For ease of understanding, we both separated the optics from the stage and shaded the optics. Again, the wafer 20 rests on the stage in the bath.

In the FOA, at 5, the Examiner argued that capillary forces between the lens and wafer inherently causes the immersion medium contact with the lens to be restricted by capillary action. The Examiner's argument ignores the contact area between the immersion medium and the work piece, which is part of the claim language. In Lin, the work piece (wafer) is submerged in the bath. Capillary action plays no part in determining the area of contacting between the immersion medium and the work piece.

Because the Examiner's reading of the reference is clearly wrong, the case should be allowed or a further office action entered without need for a full appeal.

Rejection under Section 103 is Contrary to Law

The Examiner rejected **claims 1-10, 17-19 and 23-28** under 35 U.S.C. § 103(a) as unpatentable over Lin in view of U.S. Patent Application Publication No. 2003/0123040 (Almog). The Examiner relied on Lin (FOA 3-4) for the same features under § 103(a) as under §102(e). The secondary reference Almog is not argued to read on either the orifice in optics or capillary force limitations.

Therefore, the rejection under § 103(a) is clearly wrong for the same reasons that the rejection under § 102(e) is wrong. The case should be allowed or a further office action entered without need for a full appeal.

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CONCLUSION

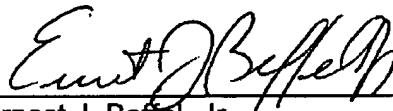
Applicant respectfully submits that the pending claims should be allowed without full briefing by Applicant and the Examiner. We have explained the disclosed and reference technologies clearly enough for the decision to be made to allow the claims.

Applicant would welcome an interview, if the conference is so inclined. The undersigned can ordinarily be reached at his office at (650) 712-0340 from 8:30 a.m. to 5:30 p.m. PST, Monday through Friday, and can be reached at his cell phone at (415) 902-6112 most other times.

The Commissioner is hereby authorized to charge any additional fee determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (MLSE 1035-1).

Respectfully submitted,

Dated: June 27, 2006


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